

REMARKS

Claims 1-93 remain present in this application.

The specification and claims 1, 4, 5, 11, 14 and 15 have been amended, and claims 94-103 have been cancelled without prejudice or disclaimer. Reconsideration of the application, as amended, is respectfully requested.

Claim for Foreign Priority

It is noted that a certified copy of Taiwan Appl. No. 091121370, filed September 18, 2002, was submitted on June 23, 2003. Acknowledgement of the claim for foreign priority and confirmation that the certified copy of the priority document has been received are respectfully requested.

Objection to the Drawings

The drawings stand objected to under 37 CFR 1.83(a). Replacement drawing sheets which address the Examiner's objections are attached hereto. Accordingly, reconsideration and withdrawal of any objection to the drawings are respectfully requested.

Rejection under 35 USC 112

Claims 1-40, 68-85 and 96-103 stand rejected under 35 USC 112, second paragraph, as being indefinite. This rejection is respectfully traversed.

Claims 41-49 and 86-93 stand rejected under 35 USC 112, second paragraph, as being incomplete. This rejection is respectfully traversed.

Claims 50-58 stand rejected under 35 USC 112, second paragraph, as being incomplete. This rejection is respectfully traversed.

Claims 59-67 stand rejected under 35 112, second paragraph, as being incomplete. This rejection is respectfully traversed.

Regarding independent claim 1, Figs. 5A and 5B are taken as an example. Said first gap 571 is a region without source/drain implantation in the substrate under the said second gate 541. Said second gate 541 prevents the substrate under said second gate 541 from being doped during source/drain formation. Thus, a first gap 571 is formed. Similarly, second gap 572, third gap 573, and fourth gap 574 are formed in the substrate under the third gate 542, fifth gate 543 and sixth gate 544, respectively.

Regarding independent claim 68, Figs. 12A and 12B are taken as an example. The third doping (ESD implantation) regions 591 and 592 are N type lightly doped regions disposed under the first doping (drain) region 551 and second/fifth doping (source) region 552, and respectively near first and second end of the first gates 531 and second gate 532. The doping concentrations of the third doping (ESD implantation) regions 591 and 592 are lower than those of the first doping (drain) region 551 and second/fifth doping (source)

region 552. It is clear to those who skilled in the art about what the third doping region is.

Regarding independent claim 77, Figs. 13A and 13B are taken as an example. The N type first well 593 and second well 594 are disposed under the first doping (drain) region 551, and respectively near first and second end of the first gate 531 and second gate 532. It should clear to those who skilled in the art what the first well is.

Regarding independent claim 41, Figs. 7A and 7B are taken as an example. The isolation regions (gaps) 741~744 are formed by an implantation step compatible with a CMOS process, during which a mask blocks the isolation regions (gaps) 741~744 from N⁺ ions. The isolation regions are in the first doping region and the active region in the isolation regions are blocked out from N⁺ ion doping. It is clear to those who skilled in the art about what the isolation region is.

Regarding independent claim 86, Figs. 14A and 14B are taken as an example. There is no isolation protruding into the first doping region. There are only the gates 531 and 532 bending at an angle so that their center portions protrude into the drain region 551. Thus, the widths of the drain region 551 near the center portions of the gates 531 and 532 are smaller than those near each end of the gates 531 and 532. It is clear to those who skilled in the art about what the first gate is.

Regarding independent claim 50, Figs. 8A and 8B are taken as an example. The first isolation region (gap) 741, second isolation region (gap) 742, third isolation region (gap) 743, and fourth isolation region (gap) 744 are located in the second doping (source) region 752. The isolation regions (gaps) 741~744 are formed by an implantation step compatible with a CMOS process, during which a mask blocks the isolation regions (gaps) 741~744 from N⁺ ions. The isolation regions are in the first doping region and the active region in the isolation regions are blocked out from N⁺ ion doping. It is clear to those who skilled in the art about what the isolation region is.

Regarding independent claim 59, Figs. 9A and 9B are taken as an example. The isolation regions (STI regions) 941~944 protrude into the first doping (drain) region 951 near first and second end of the first gates 931 and second gate 932. It is clear to those who skilled in the art about what the isolation region is.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims should particularly point out and distinctly claim the subject matter of the instant invention. Accordingly, reconsideration and withdrawal of the 35 USC 112, second paragraph rejection are respectfully requested.

Conclusion

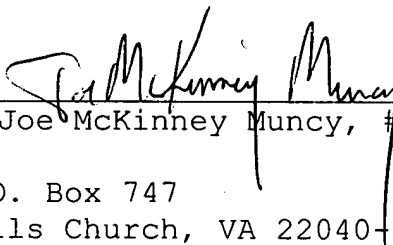
Favorable reconsideration and an early Notice of Allowance are earnestly solicited.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Replacement Drawing Sheets

AMENDMENTS TO THE DRAWINGS

Attached hereto are ten (10) sheets of corrected drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected drawings incorporate the following drawing changes:

In Figs. 5B, 6B, the first node 555 and second node 556 are shown. In Figs. 7B and 8B, the first node 755 and second node 756 are shown. In Figs. 9B, 10B, and 11B, the first node 955 and second node 956 are shown. In Figs. 12B, 13B and 14B, the first node 555 and second node 556 are shown. These nodes are discussed in the specification for the various embodiments.

It is respectfully requested that the corrected drawings be approved and made a part of the record of the above-identified application.